Missouri Assessment Program

Communications Arts Practice Test

Grade 6

Student's Name	
(please print first name and last name)	
Teacher's Name	_
(please print first name and last name)	
School District	
Building/Room	
Date	
Form 22	

Do not open test booklet until instructed to do so.

by Andy Boyles

Small, dark pieces of a backbone were stuck in the gray rock, like raisins in a cookie. They were the fossils of a strange crocodile that lived among the dinosaurs.

The fossils were found in the summer of 1998. Scientists were searching for fossils in a hot, dry area of Madagascar. Rain does not fall there very often, but when it does, it strips away the hillsides, exposing layers of rock that are millions of years old.

In one hill, the scientists recognized a layer of soft, gray rock. They had seen the same layer in other hills nearby. By studying the layers of rock above and below this layer, they had discovered that the rock had been formed from dirt laid down about seventy million years ago, during the Dinosaur Age.

On their hands and knees, the scientists examined the exposed surface for fossils. One member of the team was Laurent Randriamiaramanana, a student from the University of Antananarivo (the capital of Madagascar). He was the first to spot the crocodile's fossils showing in the rock.

After a few days of picking carefully at the rock, the team removed a chunk that contained most of the animal's bones. They took it to Roosevelt University in Chicago. That's where Dr. Greg Buckley, one of the senior scientists on the fossil-hunting team, has his laboratory.

"In the field, we had exposed the back of the skull, but not enough to know that this animal was something weird," Dr. Buckley said. "It wasn't until we got it back to the lab and started cleaning it up that we realized it was something really different."

A Strange Skull

The skull was only five inches long and three inches wide. But it was more complete

than most fossil skulls because it still had its jaw bones and teeth.

The creature was a crocodile. The scientists could tell because some details of its skull are found together in crocodiles and in no other creatures.

Also, the crocodile was an adult. As in many other kinds of animals, certain bones start as separate pieces, then they fuse together into a single piece as the animal grows. This crocodile's bones had grown together, as in an adult.

But this reptile did not seem to be suited for the life of a crocodile.

A crocodile catches its food by lying in ambush. In a swamp or other wet habitat, it hides under the surface of the water, waiting for a bird or other animal to come close. Then it tries to catch its prey in its mouth.

The modern crocodile's skull is well suited for hunting this way. Its eyes and nose are high on its long, flat head. Only the top of the head needs to stick out of the water. The crocodile can wait there for a long time, breathing easily while it watches for its prey. When an animal does come by, the crocodile lunges and snaps its jaws. The jaw muscles are big and strong, and the joint is near the back of the skull, which gives the jaws a lot of extra power.

Not a Hunter?

But the skull from Madagascar was not typical for a crocodile. It was more round than flat, and it had a short, round snout instead of a long one. The scientists named it *Simosuchus*, which is Greek for "pugnosed crocodile."

Simosuchus would not have been good at lurking in the water, Dr. Buckley said. Its eyes were on the sides of its head, and the nostrils were on the front of the snout.

The crocodile would not have been good at snapping at its prey either. The jaw joint was closer to the front of the skull, giving the reptile a slower bite.

So how did *Simosuchus* make a living? The scientists found an answer in its strange teeth.

Modern crocodiles have sharp, coneshaped teeth, but in *Simosuchus* each tooth was shaped more like a mitten with a row of points across the top.

Teeth like these are not very useful to a meat eater. They look more like the teeth of plant-eating reptiles (such as iguanas) and plant-eating dinosaurs (such as Ankylosaurus). So *Simosuchus* was a rare creature—a crocodile that ate plants instead of meat.

More Mysterious Clues

Some other parts of the skull still had to be explained. *Simosuchus* had heavy bones around the eyes and ears. The snout stuck out over the jaw so that the top teeth didn't touch the bottom teeth in the front. The places where the neck muscles attached were big, which is a sign of a thick, strong neck. And the neck was connected under the back of the skull, which means *Simosuchus* could hold its head up.

Among animals living today, that description fits creatures that use their heads to burrow through dirt or mud, such as moles and monitor lizards.

In the long history of Madagascar, the island has been home to many strange and wonderful animals. Now science has added one more: a little crocodile that ate plants and lived in a burrow that it dug with its snout.

1.	Explain how the author's headings help you to understand the passage. Use one
	example from the passage to support your answer.
2.	Imagine that you found animal fossils in a park near where you live. Based on the information in the passage, what are two steps scientists might take to study the fossils?

3. Complete the chart by including three more differences between *Simosuchus* and a modern crocodile.

Simosuchus	Modern crocodile
1. round skull	1. flat skull
2.	2.
3.	3.
4.	4.

4.	In a few sentences, summarize the introduction of the passage.

Alı	ternate Constructed-Response Item
	nat information about the skull of the animal led scientists to understand that the
	codile ate plants instead of meat? Support your answer based on details in the passage.
Ciı	rcle the letter of the correct answer for Questions 5 and 6.
5.	What is the author's purpose in writing "A Weird Little Crocodile"?
	A. to inform readers about the discovery of <i>Simosuchus</i> fossils
	B. to persuade readers to become scientists
	C. to entertain readers with a humorous story
	D. to evaluate the characteristics of crocodiles
6.	According to Andy Boyles, scientists found that "pieces of a backbone were stuck in
	the gray rock, like raisins in a cookie." Which kind of figurative language is the
	author using in this instance?
	A. metaphor
	B. onomatopoeia
	C. personification
	D. simile

7.	Now you will write a paper in response to a writing prompt. First, read the prompt in the box below.
	You will now have 45 minutes for your prewriting activities such as brainstorming, listing, outlining, and writing a rough draft. Use the pages in the test booklet labeled "prewriting" to record your ideas and your rough draft.
	You will then have another 45 minutes in which to write your final paper. Use the pages in the test booklet labeled "final paper" to record your completed work.
	In "A Weird Little Crocodile," Dr. Buckley studied fossils. Think
	about a subject you would like to study some day. Then write a
	paper to a classmate in which you explain the subject and why it is important to you.
	Prewriting

Prewriting	
	_

Prewriting	

Prewriting	
	, ,

Prewriting	

Final Paper

Final Paper

Final Paper

Final Paper
- <u></u>
